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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,549	12/28/2004	Alexander Wartini	263100US0PCT	2742
22850	7590	12/09/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.				
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EXAMINER
WITHERSPOON, SIKARL A

ART UNIT	PAPER NUMBER
1621	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/519,549	Applicant(s) WARTINI ET AL.	
	Examiner Sikarl A. Witherspoon	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 12, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bost (Perfumer and Flavorist, vol. 7).

Bost discloses the one-step cyclization of dimethyl octadecanedioate to cycloheptadecanone over a high surface area thorium oxide catalyst, at 378° C (page 57). This reaction anticipates the instant claims.

Claims 1, 2, 4-6, 8, 12, 14-16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruzicka (US 1,702,843).

Ruzicka discloses a process for making macrocyclic ketones by cyclization of a dicarboxylic acid at a temperature between 300 and 500° C with titanium hydroxide, and in another example, with titanium oxide, to produce the macrocyclic ketone (examples 2 and 4). The processes disclosed by Ruzicka anticipate the instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 7, 9-11, 13, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruzicka (US 1,702,843).

The instant claims further limit the cyclization process of the present invention to the catalyst being employed as a fixed-bed catalyst, the catalyst being titanium dioxide doped with alkali metal or alkaline earth metal oxides, the ketone produced being exaltone or civetone.

Ruzicka does not teach these specific limitations; however, the examiner takes the position that the instant claims are rendered obvious since, for one, a person of ordinary skill would at his or her own discretion, employ the heterogeneous catalyst, in this case, the titanium hydroxide or titanium oxide catalyst taught by Ruzicka in a fixed-bed, fluidized bed, or any other catalytic system that would have been found to optimally catalyze the cyclization reaction. In addition, it is known in the art that such metals as titanium (or any other transition metal) can be doped with other metals of the same groups or with alkali or alkaline earth metals in order to affect the activity of the catalyst, either by enhancing the activity, or in some cases, to deactivate, or lessen the activity of the catalyst. Although Ruzicka does not recite a specific example of exaltone or civetone being made, it would have been obvious to a person of ordinary skill in the art, presented with Ruzicka's disclosure, that the generic structure of the starting material encompasses alkyl derivatives of dicarboxylic acids that if employed as reactant would

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result in the production of ketones such as civetone and exaltone, thereby rendering this limitation obvious as well.

The examiner would like to remind applicants to include a reference to the continuity data in the first line of the specification, when replying to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

saw

Sikarl A. Witherspoon
SIKARL A. WITHERSPOON
PATENT EXAMINER